REMARKS

The amendments to the specification are fully supported by original claims 19-21 and 26, and by the description in the specification (e.g., page 5, lines 22-24; page 6, lines 16-18; page 13, lines 4-6; page 21, lines 11-21; page 25, line 21 to page 26, line 6; page 26, lines 14-22; FIGS. 6, 10, 18, and 19; etc.).

No new matter has been added. Upon entry of this Response, claims 11-21 and 25-26 remain present and active in the application.

Substance of Interview

Applicant would like to thank Examiner Amanda P. Wood for the very courteous and helpful discussion held with his representative on August 20, 2008. The substance of this interview is reflected in the remarks below.

It was explained during the interview that each of independent claims 11 and 25 recites a control unit configured for performing its recited operations on the basis of detected fluorescence information—an element that is neither taught nor suggested by *Fukuda et al.* (U.S. Patent No. 6,165,740), *Kubitschek et al.* (*Journal of Bacteriology*, 1986, 168, 1466-1467) or *Chupp et al.* (U.S. Patent No. 5,631,165).

In response to the argument set forth on pages 9 and 10 of the Office Action— namely, that the recited "control unit" configured to perform the recited operations is merely a functional limitation that does not merit patentable weight, it was explained during the interview that the recited control unit configured to perform the recited operations does, in fact, convey structure and does not merely represent an intended use.

Applicant respectfully draws attention to the Office's *Examination Guidelines for Computer-Related Inventions Final Version*, which states as follows (page 13):

> The applicant may define the physical structure of a
> programmed computer or its hardware or software
> components in any manner that can be clearly understood by
> a person skilled in the relevant art.

Applicant respectfully submits that the recitation in each of independent claims 11 and 25 of a control unit configured for performing its recited operations on the basis of detected fluorescence information would have been clearly understood by the skilled artisan.

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Moreover, as an illustration of Applicant's assertion that the recited control unit configured to perform the recited operations does, in fact, convey <u>structure</u> as opposed to mere intended use, it was noted during the interview that two otherwise identical computers—a first having a default configuration set by the manufacturer and a second that has been modified to store a software program that enables the computer to execute a series of specific processes that the first computer lacks the ability to perform (e.g., determining whether bacteria in a sample are bacillus or coccus based on analysis of fluorescence information)—have unquestionably different structures.

In the preceding example, the difference in structure resides in the "functional descriptive material" (i.e., data structure) stored on the second computer. Inasmuch as this data structure has been recorded on a computer readable medium, it qualifies as statutory subject matter and should be accorded patentable weight (MPEP 2106.01). Moreover, the recited "functional descriptive material" must be considered as a limitation in assessing the patentability of the claim, as required by the *Examination Guidelines for Computer-Related Inventions Final Version* (page 27), which states as follows:

> Functional descriptive material is a limitation in the claim and must be considered and addressed in assessing patentability....

Finally, in response to an argument raised during the interview that Applicant is attempting is to define an apparatus claim based on method steps, Applicant respectfully draws attention to MPEP 2106.01, which states as follows:

> When a computer program is recited in conjunction with a physical structure, such as a computer memory [e.g., the "control unit" recited in independent claims 11 and 25], USPTO personnel should treat the claim as a product claim.

Claim Rejections – 35 U.S.C. § 112, First Paragraph

The rejection of claims 19-21 and 26 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is respectfully traversed.

Applicant respectfully submits that the phrase "output part" recited in claims 19-21 and 26 is described in and fully supported by the specification as filed (e.g., page 5, lines 22-24; page 6, lines 16-18; page 13, lines 4-6; page 21, lines 11-21; page 25, line 21 to

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page 26, line 6; page 26, lines 14-22; etc.). Moreover, Applicant further submits that the recited "output part" is clearly shown in the drawings (e.g., generally as "S9" in FIGS. 6 and 18 and, in specific embodiments, as liquid crystal touch panel "11" in FIGS. 10 and 19).

Notwithstanding the above, this ground of rejection has been rendered moot by the present amendments to the specification, which provide *ipsissima verba* of the phrase "output part" recited in claims 19-21 and 26.

Accordingly, for at least these reasons, withdrawal of this ground of rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 112, Second Paragraph

The rejection of claims 19-21 and 26 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention is respectfully traversed.

As noted above, the phrase "output part" recited in claims 19-21 and 26 is described in and fully supported by the specification as filed, and is clearly shown in the drawings. Moreover, as further noted above, this ground of rejection has been rendered moot by the present amendments to the specification, which provide *ipsissima verba* of the phrase "output part" recited in claims 19-21 and 26.

Accordingly, for at least these reasons, withdrawal of this ground of rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 102

The rejection of claims 11-15, 17, 19, and 25-26 under 35 U.S.C. § 102(b) as being anticipated by *Fukuda et al.* is respectfully traversed. As further explained below, *Fukuda et al.* fails to teach or suggest each and every element of independent claims 11 and 25.

Fukuda et al. describes a method and device for distinguishing between Bacilli, Staphylococci, Streptobacilli, Streptococci, and yeast fungi based on optical information obtained from scattered light (e.g., abstract; col. 3, lines 10-18, 21-27, and 42-50; col. 3, line 67 to col. 4, line 7; col. 6, lines 55-61; col. 7, lines 7-16; col. 13, lines 11-24; etc.). *Fukuda et al.* contains no teaching or suggestion of utilizing fluorescence information as a

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parameter for creating a scattergram, as required by independent claim 11. Similarly, *Fukuda et al.* contains no teaching or suggestion of analyzing <u>fluorescence</u> information to obtain a bacteria analysis result, as required by independent claim 25. On the contrary, *Fukuda et al.* teaches away from "fluorescently stained bacteria"—such as those recited in each of independent claims 11 and 25—and invokes instead the dual parameters of intensity and duration of emitted <u>scattered</u> light (e.g., col. 2, lines 11-20). Thus, the particle-size distribution graphs described in *Fukuda et al.* have horizontal and vertical axes that correspond, respectively, to duration (Fscw) and intensity (Fsc) of emitted scattered light (e.g., col. 7, lines 10-12; col. 8, lines 4-6; FIGS. 9-20, FIG. 29, etc.). This contrasts with scattergrams having horizontal and vertical axes that correspond, respectively to fluorescent light intensity (FL) and forward scattered light intensity (Fsc), such as those shown, for example, in FIGS. 7-8 and 11-17 of Applicant's specification.

As presently written, each of independent claims 11 and 25 recites that the control unit is <u>configured for performing its recited operations</u> on the basis of detected fluorescence information. The signal-processing unit **10** described in *Fukuda et al.* is clearly <u>not</u> so configured. By contrast to the claimed invention, *Fukuda et al.* is completely silent with respect to any type of computer program that would enable signal-processing unit **10** to execute operations using fluorescence information as a parameter (much less the specific operations recited in each of independent claims 11 and 25). Instead, even if the signal-processing unit **10** described in *Fukuda et al.* were to receive fluorescence information from photo diode **8** and/or photomultiplier tube **9** (col. 6, lines 49-61), signal-processing unit **10** would still lack the wherewithal that would enable it to use this information to determine whether bacteria in a sample are bacillus or coccus. As explained during the interview, the recited configuration of the recited "control unit" provides a structure that is neither taught nor suggested by *Fukuda et al.*

At a minimum, *Fukuda et al.* contains no teaching or suggestion of (a) "a control unit configured for performing operations comprising: creating a scattergram of the bacteria using...fluorescence information as parameters; analyzing distribution of the bacteria in the scattergram; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 11; or (b) "a control unit configured for performing operations comprising:

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analyzing...fluorescence information obtained from the bacteria; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 25.

Thus, inasmuch as *Fukuda et al.* fails to teach or suggest each and every element of independent claims 11 and 25, Applicant respectfully submits that the claimed invention is neither anticipated by nor would have been obvious in view of this reference. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

The rejection of claims 11-21 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over *Fukuda et al.* in view of *Kubitschek et al.* and *Chupp et al.* is respectfully traversed. As explained above, *Fukuda et al.* fails to teach or suggest each and every element recited in independent claims 11 and 25. Moreover, the deficiencies of *Fukuda et al.* are not remedied by *Kubitschek et al.* or *Chupp et al.*, which likewise fail to teach or suggest all the elements of these independent claims.

At a minimum, none of *Fukuda et al.*, *Kubitschek et al.*, and *Chupp et al.* teaches or suggests (a) "a control unit configured for performing operations comprising: creating a scattergram of the bacteria using...fluorescence information as parameters; analyzing distribution of the bacteria in the scattergram; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 11; or (b) "a control unit configured for performing operations comprising: analyzing...fluorescence information obtained from the bacteria; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 25.
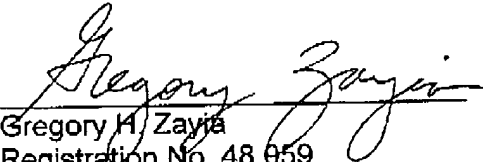
Thus, inasmuch as *Fukuda et al.*, *Kubitschek et al.*, and *Chupp et al.* fail to teach or suggest each and every element of independent claims 11 and 25, Applicant respectfully submits that the claimed invention is neither anticipated by nor would have been obvious in view of these references, individually or in combination. Accordingly, withdrawal of this ground of rejection is respectfully requested.

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Conclusion

In view of the Remarks set forth above, Applicant respectfully submits that the claimed invention is in condition for allowance. Early notification to such effect is earnestly solicited.

If for any reason the Examiner feels that the above Remarks do not put the claims in condition to be allowed, and that a further discussion would be helpful to advance prosecution, it is respectfully requested that the Examiner contact the undersigned agent directly at (312)-321-4257.

Respectfully submitted,

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